·Vol. XIV. No. 9. Estd., Jan. 1923. September 1936.

Health

A Journal Devoted to Healthful Living

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Published in
ENGLISH, TAMIL, TELUGU AND CANARESE.

Annual Subscription for any edition Rs. 1-8. Foreign Rs. 2. Post paid.

Editorial and Publishing Offices:—323, Thambu Chetty Street, George Town, Madras.

Editorial

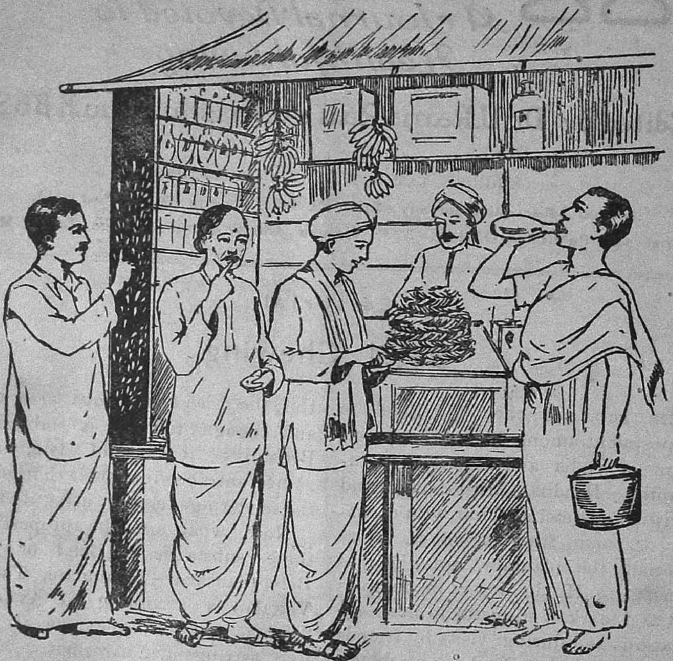
Betel Chewing

The habit of chewing Betel is prevalent among 90% of the population of India and among all communities—Hindus, Mussalmans and Christians. Betel and nut with cocoanut or some fruit or other, more especially the plantain, are given as offerings to Hindu deities in temples and as a mark of etiquette on marriage occasions and during visits by friends and relations in Hindu households. During Mahomadan rule, Betel and *Athar* used to be served at the Badsha's Durbar. Betel is chewed generally after the principal meal in the day with nut, chunam, and spices. It is not missed in the night either. Unfortunately, now-a-days, betel is chewed by a good number of men and women incessantly, almost all the 24 hours of the day and is intended to serve as food to appease hunger and as water to quench thirst. To add to this, the dried leaf of tobacco is taken, and though tobacco is tabooed by Brahmins, it has of late, slowly gained entrance into their households, the modern generation using it freely.

Now, what are the properties of these substances? Betel or Piper Betel (Sanskrit—Tambulam, Tamil—Vettalai) is according to Ayurveda, "pungent, bitter, spicy, sweet, alkaline, astringent, a carminative, a destroyer of phlegm, a vermifuge, a sweetener of breath, an ornament of the mouth and a kindler of the flame of love" Areca catechu, (Sanskrit—Guvaka, Pagu, Tamil—Pakku) is both "astringent and diuretic. The unripe fruits when not dry in their interior have intoxicating properties and produce a mild headache and giddiness in some". The lime is added "to stimulate salivary secretions and stain the mouth red. Lime is a

strengthener of bones'. Tobacco contains a poison called nicotine and is said to produce an exhilerating effect. Spices and cardamoms are taken to produce a pleasant odour.

The Hindu Sastras permit betel chewing in moderation and never more than three times a day. It is said that in the mornings, more of nut and less of betel and chunam, should be used, in the noon, more of chunam and less of betel and nut and in the night, more of betel and less of chunam and nut; and that the first-flowing secretion should be spit out. Betel chewing is intended for only those leading a marital life, to rouse their passions and make the couple appear charming and beautiful. Betel leaf with chunam, pepper and dried ginger is generally used as a carminative for infants and children in the form of decoction. But, bachelors, widows, sanyasis and those who perform penances are forbidden from using betel-leaf. A Sanskrit *sloka* says that if they do chew betel, they must be held to have eaten cow's flesh. Another *sloka* gives the bad effects of over-chewing betel which when translated means :—



An Unhygienic and Insanitary Betel-leaf Shop.

"The whole body, eyes, hair, teeth, and ears will get weakened by over-chewing."

"Those suffering from fever, those with dried mouth, with scanty blood,

with fits of fainting and with eye-troubles and weaklings should not chew betel."—That is the substance of another sloka.

The deleterious effects of tobacco have been described by a Vaidyar in these words:—

"It will mar the effects of medicine, it will cause dryness in the mouth, will cause depression, induce biliousness, destroy the semen, so none should use tobacco".

So much, according to Ayurvedic and Siddha systems of medicine. According to the Allopathic system of Medicine, the following ill-effects are produced by habitual and excessive betel chewing.

1. *Teeth.*—"The teeth are stained deep red and the deposits are found to contain lime, nicotine, and organic matter from the betel and nut. Attrition of the enamel and exposure of the dentine are usually noticed in inveterate betel chewers. This attrition produces a sharp edge in the teeth and this in turn irritates the mucous membrane of the tongue and cheek."

2. *Gingival margin (Gum):*—"It is definitely inflamed in excessive betel-chewing. The term excessive is applied to those cases where more than five chews are indulged in daily. The gingival trough contains a sediment of lime and nicotine and in mouths which have a tendency to collect tartar, excessive betel chewing accelerates tartar deposition."

3. *Oral mucous membrane.*—"It is definitely thickened in excessive betel chewing. The mucous glands are hyper-trophied (swollen) in the early stages and sclerosed (hardened) in the later stages".

4. *Tongue,* 'is fissured and inflamed with excessive betel chewing.'

Carcinoma is a dreadful disease *The incidence of carcinoma amongst* the betel chewing population is well marked. Carcinoma is greater amongst the races inhabiting the West Coast of India, the Malayalees. The Sinhalese come second and the Tamils, third. "In 94%, of the cases of carcinoma of the cheek, tongue and lip, a history of excessive betel chewing was obtained."—that is the verdict of a Doctor—Dentist who collected statistical data in Ceylon, recently.

We therefore warn betel chewers of the danger of cancer of the cheek, tongue and lip, resulting from long over-indulgence in betel chewing *Betel chewing should be as much dreaded* and shunned as alcohol-drinking.

A New Motor Ambulance for the City of Madras

The Offg. Commissioner of Police informs us that the Madras City Police are now equipped with a new motor ambulance which has *accommodation* for two stretcher cases. This ambulance is available for hire to members of the public by day or night at a charge of eight annas per mile single journey or rupee one per mile return journey. The existing ambulances in the city are all attached to hospitals and are so fully engaged as to be not available for use apart from hospital work. This new ambulance car is really a boon to the citizens of Madras, who have all along been put to enormous trouble and inconvenience—not to mention loss of limb, and at times, even loss of life, for want of this very indispensable civic amenity. We are grateful to the Commissioner of Police and the Surgeon-General with the Government of Madras, at whose instance, we understand, the Government have permitted its use by the public. The ambulance can be called by day or night at Phone No. 99.

SANITARY SENSE

By S. K. Chaudhuri, M.B.E., B.A., M.B.,
Capt., (Late I. M. S.) Benares City.

SANITARY sense is hard to define. It can best be described as a sense which guides men and women to live healthy lives so that the necessity of medicines is reduced to a minimum. To impart this sense the impressionable age of children should be taken advantage of : the minds of grown up people is not the soil where it can flourish.

Text books containing an elementary knowledge of anatomy, physiology and bacteriology including parasitology should find a place in the curriculum of primary schools. There need be little difficulty in coining suitable terms in vernacular. As a matter of fact quite a large number of words has already been translated and adopted in some of the important vernacular languages of our country and further enrichment of scientific vocabulary will go on if there is an impetus for coining new words. Books on anatomy and physiology have been successfully written by Verma and others in Hindi which aspires to be the national language of this sub-continent. Instruction can further be imparted by means of the wireless, movies and talkies in towns provided with electricity and gramophones and pictures in villages. If children can easily learn new languages with the aid of the linguaphone and pictures there is no reason why advantage of this method of teaching should not be taken by conveying the simple lessons on healthy living

"The dhobi or washerman mixes promiscuously the clothes collected from small-pox-stricken areas with those of other customers and thus spreads the disease from one place to another."

through the ear and eye at the same time.

The text books on sanitation already existing in the vernacular langauges are capable of improvement. Habits and customs should be discussed in detail with a view to expose their deleteriousness and remedies should be suggested. Attention should be focussed on the everyday life of town dwellers and villagers alike. Take for instance the common practice of scrubbing utensils with earth picked up from anywhere; the housewife does not know what a serious risk she runs by this practice which is a heritage of the past. The ubiquitous barber has pursued his profession with the dirty razor and hands without opposition from the public or sanitary authorities. How many of his customers realise that they are inoculated by disease germs which are hard to get rid of. It is only when there is a demand for barbers with definite ideas of cleanliness by members of the public, can this serious menace to health be brought under control. The dhobi or washerman mixes promiscuosly the clothes collected from small-pox-stricken areas with those of other customers and thus spreads the disease from one place to another. He has neither the knowledge nor the means of disinfecting clothes contaminated by the patients. If the sanitary authorities enforce proper laws, their action may be misconstrued and a strike may be the result: if on the other hand public opinion is strong on this point, serious consequences can be mitigated if not entirely averted. It may be mentioned in the majority of houses it is not practicable to burn the infected clothes and bedding. The sweetmeat vendor becomes the centre of attraction to boys and girls in the street. Not only they but their parents too are hopelessly ignorant of what dangers lurk in the tray after the flies have had their share. If the Medical Officer of Health takes measures to have it made fly-proof, complaints of harsh treatment are made and the public readily lends its sympathy. If children and their guardians knew how many diseases are carried by flies from one person to another naturally public opinion would be formed against this practice; this would be far more effective than the orders of the Medical Officer of Health. Milk is extolled as the best food, especially for the so called vegetarian, but how little he knows about the steady process of contamination which goes on beginning from the milking of the dirty udders with dirty hands into a dirty receptacle to storing it and exposing it in surroundings most suitable for the growth of disease germs before it is consumed unsuspectingly. Such instances can be multiplied with respect to the customs and habits of people peculiar to different provinces

Domestic Science has become a recognised subject of study for girls and young women in some Universities. Books have been written mostly by foreign authors and these are not obviously adapted for teaching in the different provinces of our country Hygiene, home nursing and similar subjects should find a place in every text book. It is our duty to train the future mother so that her children may grow unhampered by insanitary practices and untrammelled by pernicious customs.

For rural areas the decadent dispensaries now in existence should be adequately subsidised and new ones

established under capable men. The average remuneration in villages from private practice is poor; this should be supplemented by subsidies from local bodies. It should be the duty of the medical man not only to render such medical and surgical aid as they can but to teach the gospel of prevention of disease. They are better fitted to impart the knowledge of elementary hygiene than the village school master even though all of them have not been specially trained in public health. The teaching so given will take a few years to bear fruit but the effect will be lasting. Real reform in sanitation will come about when it is self imposed and when the laws enforced by authorities naturally cease to be irksome. The Sanitary Commissioner with the Government of India can do little with his vast army of sanitarians if the people think that they themselves have no part to play in preventing the spread of infection. Preventive medicine has stood the test of time and it is going to be the medicine of the future. In a country where so many systems of medicine, ancient and modern, are in vogue, where grand mothers' remedies and those acquired from holy saints dwelling in mountain caves are infallible, is it not astonishing the average span of life should be twenty three years? Those responsible for the education of children should pause and think how sanitary sense can be infused.

THE RISING SUN

By Dr. Kartic Chander Dutt, L.M.S., M.R.A.S.,
Chief Medical Officer Sonepur State. Formerly, Asst. Surgeon in Service of the Govt. of India, District Medical Officer in H. H. The Nizam's Service, Teacher of Materia Medica and Therapeutics, National Medical College, Calcutta.

PART III

Well, it has been proved that the rays of the Rising Sun are blessings unto us bestowed by the All-Blissful Being for the preservation of health as well as for the cure of ailments.

Now, the question is how to utilise the Rising Sun to our best advantage. This is not at all difficult for an Indian who is favoured with the Rising Sun all the year round. The young and the old, the boy and the girl, are simply to walk to the western bank of the sea, river, lake or a tank early morning at Sun Rise. Then they should enjoy a Rising Sun bath while wearing a thin light apparel.

What parts of the body should be especially envigorated by the Rising Sun bath? The most important parts are the five organs of *Jnanam* (Special senses *viz*, (1) the organs of sight *i.e.* the eyes (2) The organs of hearing *i.e.*, the ears (3) the organs of the sense of smell *i.e.* the nose (4) the organs of taste and speech *i.e.* the tongue and oral organs (5) the skin in general *i.e.* the parts concerned in the sense of touch.

Is there any evidence that any of these sense organs are deteriorating in the present generation? Yes, there is the record of bad health of Indian students as published by the Universities year after year.

The latest health examination report of the students of the Calcutta University records:—Eye defect in 30%, enlarged Tonsils in ·27%, diseases of the digestive system in 23%, caries of the teeth in 10% of the students. This statistics includes both boys and girls. Indeed, the health of the girls is more delicate than that of the boys. This augurs ill for the future of India. Napolean Bonaparte said "France needs good mothers." No doubt, Bonaparte was one of the greatest nation-builders the world has seen. Indeed, his injunction is worth its weight in gold when applied to the dying Indian Nation. What is true of France is axiomatically true of India to-day. I say, India needs good mothers more than anything else. The health of the Indian girls is even more necessary than that of the boys. When Indian mothers attain high standard of health, then and then only can alround higher culture be possible. Then and then only can the Indian Nation take its rightful place in modern world. "*Shariram Adyam*" (Health First) is enjoined in the Ayurvedas. Old, old India followed the motto of the Ayurvedas most scientifically. Ancient India held her undisputed supremacy in culture and in bestowing the same on the rest of the world. Will the India of to-day climb up? Will the India of to-day sing "Shariram Adyam"?

If that be so, the laws of the preservation of health should receive our foremost and first consideration. The laws of health are laws of nature. These are not to be violated with impunity. It is because these are neglected now-a-days that the Indian Nation is dying and suffering. Every true-born Indian is in duty bound to enforce the laws of health on himself and on all concerned. He should preach from the hill-top that the Indian Nation is just going down the precipice of self-destruction and that the Indian is wrecking the most precious thing that makes life worth living *viz*. Health.

"Walk to the sea and perform physical exercise there. Expose to the rising sun's rays each and every sense organ, while on exercise". Pranayamam or breathing exercise is the best and the most ancient.

What are the primary laws of preservation of health to be observed? These are:—*Sattwick Ahar* (good food rich in vitamins) (2) Systematic exercise in a (3) well regulated Rising sunbath. These are the trio on which the sturdy Indian Nation of yore was built. These are the trio on which the Rishis of yore lived long and strong. These are the trio on which they based the system of yoga to attain perfection in health of body and mind. These are the trio on which the dying Indian Nation must fall back upon if it is to survive in the struggle for existence with modern civilization.

If health is to be restored in the young hopefuls of India, it is imperatively necessary that they should rise early. They should walk to the Western bank of a river, tank, or sea, and, perform physical exercise there. As the rays of the Rising Sun reach the earth, they should expose to the rays each and every sense organ while on exercise. Thus, the mouth should be opened so that, the tongue, the teeth, the palate and the throat may be bathed in the sunrays. They should raise the face so that the sunrays may enter the nostrils. The ears should also be turned to admit the rays into them. As for the eyes, it has already been noted that the rays are too strong for the internal delicate structure of the eyes. If the ultra-violet rays are allowed to fall direct on the crystalline lens and the retina of the eye then sunblindness will be produced. Therefore the sun-bath should be taken when the eye-lids are closed. Sun-bath on closed eyes is most envigorating. It will prevent and cure the myopia *i.e.* short sight and other defects so troublesome to the University students of to-day.

It will be found from the statistics quoted above that thirty percent of the University students have got eye defects. The measures taken to remedy these defects are mainly palliative. The defect in sight is generally corrected by glasses. If a visitor happens to enter a class room of a school in India, the first thing he will notice is the spectacled eyes of the students, boys or girls. No wonder that spectacles have become a fashion with the University students. In their childish fancy, the students like to take to spectacles as soon as there is some defect in the eyes. But, really speaking glasses never cure any defect in sight. On the other hand, these perpetuate any defect in sight by distracting the attention of the students and their guardians from the necessity of trying to cure that defect radically. After all a pair of glasses are like crutches to a pair of broken legs. Glasses supply an artificial aid to sight as crutches to a lamed man. Glasses can never be considered as substitutes for good keen eyes. They give a false sense of security, hence, foster neglect to an attempt at radical cure. Dr. Bates of America has fully exposed the fallacy of cure by glasses. He has formulated some true means to a radical cure. Indeed, radical cure of such defective sight lies in removing the causes. The radical cure of defective vision of our students can only be accomplished when the eyes are toned up by (1) nourishing food for the eyes rich in vitamins A, C and D, by (2) regulated exercise of the eyes, by (3) refraining from straining the eyes, by (4) giving rest to the eyes and by (5) proper sun-bath on closed eyes. This sun-bath will help the eyes to metabolise the vitamins, and thus to prevent and cure eye defects.

How to take a sun-bath? Sun-bath is best taken along with exercise in the Rising Sun. What kind of exercise should be done? The exercise should be physical and breathing. The exerciser should stand erect with the hands touching the sides of the thigh. He should then slowly raise the hands taking a deep breath slowly. He should open the mouth so as to expose the tongue and throat to the rising sun. At the same time he should shut the eyes and let the sunrays act through the closed eye-lids. After stretching the body and hands and

bending the same backwards while the breath is drawn to the fullest capacity of the lungs, he should pause in that posture for a time. This pause is necessary for the interchange of oxygen between the tidal air breathed in and the residual air within the lungs. This pause should be gradually increased as the system becomes accustomed to breathing exercise.

Then, he should exhale the air while the hands are lowered and the body is bent double till the fingers touch the toes. Then the muscles of the chest and abdomen should be contracted to empty the lungs as far as possible. Then again the first process of raising the hands slowly and taking long and deep breath should be repeated. This is a simple form of breathing and physical exercise. There are other forms also which may be learnt from physical trainers. Breathing exercise reached its fullest scientific development in the practice of 'Pranayam' as enunciated in the system of Yoga by Sage Patanjali. But, this should not be attempted haphazardly as Pranayam unscientifically attempted produces serious illness.

After one minute's exposure of the mouth, nostrils, and eyelids to the Rising Sun while on exercise, he should turn and expose one ear and the flank of the body and neck. Then the exerciser should expose the back and nape of the neck and then the other flank. The exerciser should then expose the mouth, nostrils and, eyelids again to the Rising Sun's rays. The eyelids should not be exposed for more than ten minutes a day to the rays.

When taking these physical and breathing exercises in the rays of the Rising Sun, the will with all its force should be directed to the parts on exercise at the time. A cheerfulness of mind at the time of exercise should be maintained. All cares and anxieties should be forgotten for the time being. With hope and confidence in the radiating energy of the Rising Sun, the various parts of body should receive regulated sun-bath and undergo systematic exercise.

Thus and thus only, can the regeneration of the youths of India take place. I have not the least doubt that the youths will fully realise the necessity of preservation of health by enjoying a rising sun-bath along with fresh air, proper exercise, and simple yet good food. The youths of India are placed at a great disadvantage owing to bad economic conditions of India. But, I have confidence that in the struggle for existence, they will master the difficulties in which modern civilization has placed them. I have confidence that He who has graciously bestowed on them the Rising Sun, the source of energy on this earth, will also give them sense and strength enough to follow the old laws of health reaffirmed by Modern Science. Let the youths of India pray in the words of the Yajur Veda, "You are All-energy, give me energy; You are All-strength, give me strength; You are All-powerful, give me power." Let them only remember that God helps only those who help themselves.

Endemicity of Cholera—Deltaic Areas

—By G. T. Gopalakrishna Naidu—
Asst. District Health Officer, Tanjore.

ONE may wonder why cholera prevails almost throughout the year in deltaic areas like Tanjore District. The reasons are not far to seek.

1. Tanjore District is purely an agricultural area. Mirasdars own extensive lands and they mainly depend upon Adi-Dravidas who are the tillers of their soil. These latter live almost in the midst of wet fields far removed from the main villages. A meandering stream which serves as the drainage channel from the cultivated fields passes past their low-lying hut and affords the chief source of water supply for their 'cheri.' It perhaps needs no further evidence to explain how these poor people get cholera after drinking the water which passes through the manurial contents of the fields.

2. During harvest season, these hard-worked members of society, already weakened by want and exposure, eat the freshly harvested rice, raw or slightly boiled, which in turn sets up inflammation of the bowels; Diarrhoea sets in; vomiting comes in its train; cramps and suppression of urine follow; and to all intents and purposes, typical symptoms of cholera quickly supervene.

River Water is unsafe for Drinking Purposes.

3. Further, in towns and villages where rivers are flowing, it is not an uncommon scene to find the banks of rivers strewn with nightsoil for a considerable distance. With a heavy downpour of rain, all the excreta is washed into rivers and neighbouring tanks which are numerous in these parts. Contamination of water source is the immediate issue; and the epidemic flares up after a short while.

4. Delayed reports from the village officers should also be discouraged. What generally happens in a village is this: A patient vomits and purges: but he gets over the disease without anybody knowing it. Two to three days hence, another gets the attack, though of a more serious type. He too gets over the disease with great difficulty. Nobody knows what has taken place with these two patients who are now the carriers of cholera bacilli. All infected clothes are in the meanwhile washed in the neighbouring tank which is the only drinking water source for the village. There is again a lull for three or four days, after which period, a sudden flaring up of the disease is noted. All at once six or seven cases of cholera are noticed and the serious attention of the village officer is drawn, to this 'unwarranted' and 'sudden' outbreak.

5. Advantage is not taken of the presence of drinking water wells in the villages. During such of those times when there is water in the rivers and channels, village wells are neglected. Nobody cares to draw water from them. Cocoanut and palmyra leaves find a safe place in these wells which are thus thrown out of use. But when rivers dry up, the tendency of the people is to resort to these wells referred to above and to their disgust, they find that the water is unpalatable. If nobody tries to remove silt and bale out water from these wells, the villagers do not use them during the hot part of the year. Any open unguarded tank or pond which is near at hand then forms the drinking water source. This is sufficient to bring about an attack of cholera.

6. The ignorance of most of the villagers, rich or poor, high or low, intelligent or otherwise, educated or illiterate, plays no unimportant part in the history of cholera epidemic. If these people do not refuse to understand the relation between water supply and cholera, then I suppose half the public health work is considered done.

Remedies:—1. Each village, Cheri in particular, should have a bore well.

2. Panchayat Boards—pre-unions—should have several bore wells with over-head tanks and peripheral taps.

3. Cholera inoculation should be made compulsory. Facilities should be made for routine inoculation almost throughout the year. Special staff should be appointed for this purpose.

4. Sufficient staff should be appointed for observation duty and they should be able to detect cases of cholera in the villages almost within a few hours after outbreak and report the incidence to the special staff referred to above, so that immediate preventive action may be taken.

5. Constant propaganda on prevention of cholera, and general sanitation should be the rule. Village schools are to be centres of such activities and voluntary workers have to come forward sacrificing their time and labour for this noble work.

6 Each village should have a bore-hole latrine so that soil contamination may be avoided.

Rural Reconstruction work is already engaging the attention of one and all.

It is therefore believed that any little suggestion towards the betterment of Village Sanitation may be useful.

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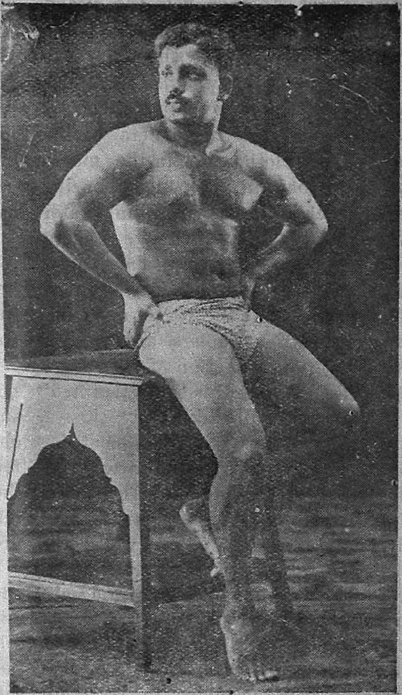
3 SEP 1936
MADRAS

The Art of Physical Culture

—By Prof. Christian Paul—
Colombo.


Prof. Christian Paul.

PHYSICAL well-being is not the monopoly of a selected few. It is the birth-right of every born human being. We are not, in the strictest sense of the term, born strong. We make ourselves strong through systematic methods. We must make it a rule to build up our body in our own interests; because it is the abode of our mind and soul. To build up a perfect physique one must have the ambition and determination followed by action. Physical perfection, strength and above all health can be attained through some methods adopted to suit individual requirements. There are several ways of reaching this goal. There are in existence today several indoor and outdoor games, such as, Billiards, Tennis, Cricket, Hockey, Golf, Football, Volley Ball, Skating, Cycling, Boxing, Wrestling, Fencing, Jiu-Jitsu, etc. One can select the one that appeals to him or her and continue in it systematically, devoting a certain amount of time daily. Some encourage the use of appliances, whereas some are against it. Exercises performed with the aid of appliances really help to develop a perfect physique but when the application of appliances is discontinued there is a serious reaction wrecking the whole human frame. Natural methods do more good than harm in as much as they are based on the movements of the different limbs of the body. Natural methods can be given up or resumed at any time by anyone anywhere. Opinions do differ in this respect. However, natural methods are generally approved by one and all to be the best. Even those who encourage appliances admit this truth. It is therefore safer and saner to follow natural methods. No accidents, no fractures, no dislocations. In the olden days,

physical perfection was considered to be one of the qualifications of a human being. As we understand from works of old, the presence of weaklings was then very rare. Today, 99% of the world's population are mere physical wrecks. The present day civilisation is mostly responsible for this state of affairs. Almost all the physical culturists and instructors we have heard of, were once mere weaklings. Frederick Mueller, better known to the world as Eugene Sandow, the father of the present day physical culture, was in his boyhood an insignificant figure—a bundle of marrowless bones, bloodless nerves and half-boiled flesh, so to speak. When his father took him round the Art Galleries of Rome, young Sandow was taken up by the fully developed form of the sculptured figures of the strong built men and women of the olden days. What appealed to him most was the formation of the muscles. This made him think deep and study human anatomy when he was 18 years of age. He is admitted in all circles as the exponent of anatomy as applied to physical culture. He, althroughout his life,. was experimenting on several methods of physical culture and gave out to the world the applicable results of his research work in the interests of humanity. He was known as "Anatomical Wonder", "Monarch of Muscles", "Living Hercules", etc. As a matter of fact, any strong man today is called "Sandow". As he was ever hard on exercising with appliances and thereby strained his muscles too much, he had to face an untimely death. In my opinion, had he only followed the natural non-appliance methods, he would have lived for some more years. He has disappeared from this world, but his name will never be forgotten.

As I have already mentioned, if we want to build up a symmetrical, healthy and strong body, we must possess the three essential qualities—ambition, determination and action. All the three must go hand in hand. There are no ready made methods for achieving physical success. To the one who craves for more knowledge on this subject, new and novel methods will present themselves. If we only know the fundamental principles on which this science is based, we are our own masters and whatever comes our way, will be our own methods.

Physical culture can be carried on as a profession as well. There are several professional Boxers, Wrestlers, Cricketers, etc., these days. Several individuals, who were never known outside their own doors, rose up to fame and made fortune in a very short time through physical culture. To mention a few, James Braddock, the dockyard labourer, who was earning a mere pittance, made fame and fortune overnight by knocking out Max Baer in the ring. Joe Louis, the Negro estate labourer, who was leading a hand to mouth life, made his name famous all over the world and amassed great wealth through physical culture. His fame and fortune are increasing day by day, knocking out every champion who comes his way. Gama's name became world-famous when he floored the Russian lion Stanislas Zybyszko in London. Gama's younger brother Imam Bux became likewise renowned when he defeated the Italian Giant, John Lemm. Some of the others who made fame and fortune through physical culture are Jack

Dempsey, Primo Carnera, Carpentier, Jack Johnson, Josef Manger, Charles Atlas, George F. Jowett, Lionel Strongfort, Capt: Muller, El Saied Nosseir (Champion Weight-lifter of Egypt), A. E. Longmate of Leeds, John Carl Gremek of U. S. A., Ronald Walker of Wakefield and Clevio Massimo of America.

Physical culture is beneficial to the layman, and profitable to the professional. It helps to build up healthy and strong citizens. In 99 cases out of every 100, physical perfection leads on to mental and moral perfection, thereby decreasing crime. It is absolutely necessary that one should possess at least just sufficient courage to combat unforeseen circumstances like an unexpected attack from an opponent, or to save some one in distress. Physical culture is the only science which throws open the direct road to health and strength, not to speak of wealth. It teaches one how to cure diseases without drugs. In any undertaking under the sun, there are virtues as well as vices, but in the physical culture field virtues outweigh vices. One cannot become a physical culturist in a day. Out of the acorn grows the oak, but it takes time.

(To be Continued).

SLEEP

By G. Narasimhaswami Aiyangar, Vizianagaram.

SLEEP is nature's tonic for a healthy living. A person cannot be healthy without sleep. We have heard people fasting unto death but nowhere have we come across people remaining awake unto death. It is because, best efforts to remain awake even for a single night prove abortive and would adversely affect the health of the individual whereas fasting for a day would be conducive to health. Fasting is also advised as a panacea for all ills; to remain awake is never advised. The more sound sleep one has, the more healthy he would be.

The best method of Sleeping.

Sleep is essential to a healthy body for it protects it from wearisomeness. It is only during sleep that all the organs also take rest, and hence a light meal at night is advised, as digestion takes place slowly. A minimum of eight hours sleep is required for every individual. As age advances people require more sleep.

The results of sleeplessness are not far to seek. A sleepless person loses his usual vim and vigour and would always be morose and drowsy. His mental faculty would also be lessened and he would cultivate an irritable temper. He would have no inclination to work.

Sleep is more essential for children and especially infants, as they thrive alone during sleep. Hence, children should be made to sleep at regular intervals unmindful to the general noises of an Indian household. I mean, the infants should be made accustomed to the disturbances at home and sleep soundly. Milk is digested by infants only during sleep.

Elders also require sleep regularly but not so regularly as infants. Sleeplessness and indigestion go hand in hand and a person spending sleepless nights constantly cannot digest his food properly. Hence, we find prudent persons taking either a light meal, or discarding meal completely whenever they have to remain awake during nights.

Sleeplessness among the present generation is mainly due to the fact that they take late dinners with costly dishes. Moreover it has become the fashion of the day with many to say that they do not take meals at night but only light tiffin. And this light tiffin consists of dozens of *chapaties* with varieties of curries, curd and milk. "I believe, we eat less now-a-days and drink more. I don't mean liquors in particular, though, in that direction too we have acquired quite a respectable taste, but other kinds of drinks like, coffee, tea, cocoa, ovaltine and other cool drinks, aerated and non-aerated. I believe most of our College students live on liquids alone. If you give them sufficient coffee for the day, I am sure they would want nothing else. The story of the old Kumbakonam College Professor who, standing in front of the Cauvery floods, wept "Oh! could not all this flood be hot coffee!", simply reflects the tendency of our age. We are gradually getting ramified in the matter of eating. Our hospitality has now taken a liquid form. We offer our guests only a cup of coffee, or a glass of iced lemonade or lemon crush. And from liquid sustenance to living on air is but a short step."

Undigestible dinners and costly drinks day in and day out contribute to sleeplessness; strong drinks should on no account be taken during nights.

At the time of retiring to bed nothing should be before the mind. A free heart would give a free sleep. Recollection of past failures and building of castles in air would contribute a great deal to the prevention of sleep. Persons of good physique free from cares and anxieties get sound sleep and the example of a labourer would amply bear testimony to this fact.

Hence, one should try to eat moderately and sleep regularly in order to maintain perfect health.

"He who drinks and has no thirst
Or eats and has no hunger
Unlike him who puts Health first
Suffers illness and dies younger".

My Lady Nicotin Kills Another King.—Lady Nicotin killed King Edward, and now she has taken the life of his son, good King George. The maladies from which these great sovereigns suffered were not in themselves grave enough to cause death, and would have doubtless in a short time ended in recovery had the kings' hearts been strong enough to keep the vital machinery going until the diseased process had subsided, as the result of the natural healing activities of the body, but, unfortunately, the vital reserve, the factor of safety, with which Nature provides the heart and every other essential organ of the body, had been exhausted by long years of indulgence in the use of tobacco.

Nicotin is a heart poison. It increases the work required of the heart by contracting the blood vessels, while at the same time lessening the power of the heart to work by poisoning its muscle fibers.

And what nicotin did to King Edward and King George, it is doing to millions of Americans and other millions in the various civilized countries of the globe, and through the murderous machinations of those public poisoners, the great tobacco companies, millions of unsuspecting women are being caught in the net of these heartless exploiters of human life, and even unborn babes are being blighted before they have seen the light of day, by smoking, expectant mothers.

Lady Nicotin killed the soldier president, General Grant, with cancer of the throat, and tortured his son to death with the same disease. How long will the intelligentsia of the world tolerate this wholesale slaughter, this atrocious sacrifice of men, women and children to the Molloch *tabacum?*—*Good Health (U. S. A.)*

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Malaria Worse than Quetta Quake

An Indian Doctor's Opinion

A remarkable comparison between the death roll in the Quetta earthquake and the ravages of malaria in India was made by Major H. W. Mulligan of the Indian Medical Service, in an address to the Singapore Rotary Club recently. Major Mulligan, was a delegate to the League of Nations international Malaria course held in Singapore.

He said that anyone visiting a highly malarious area could not fail to be appalled by the pitiable condition of the inhabitants

No Sadder Sight

"Surely," he added, "there is no sadder sight in the world than a community prostrated by malaria. Last year I had the misfortune to be in Quetta immediately after the earthquake.

"Not a single building in the city remained standing and the ruins covered, partially or completely, some 30,000 corpses.

"I confess that I was less moved by this spectacle than I have been by the sight of living corpses, in a malaria-stricken locality.

"Yet the Quetta earthquake was 'news' in every newspaper, and radio station in the world. Why? Because it was dramatic. Visitations of plague, cholera, small-pox, earthquakes, volcanoes, tornadoes and

floods make front page headlines, but malaria—the unspectacular disease quietly but effectively performing its role as the 'greatest single destroyer' of the human race — comparatively rarely attracts attention.

"It is true that malaria too may appear in epidemic form and may then take its place in the limelight for a time; for example in Ceylon but calamitous as these epidemics are, they are merely waves on the seas of the main tragedy.

World's Losses

Major Mulligan illustrated his talk with many examples of conditions in India. It was impossible,, he said, to compute accurately the world's losses through malaria, although rough estimates were available. In the United States of America, which most people regarded as a malaria-free country, it has been estimated that in deaths, loss of labour, reduced value of real estate and in other ways, malaria costs the country 100,000,000 dollars each year.

In India, he said, the losses from malaria to the individual and the family alone have been placed at about 80,000,000 dollars per year, while the effects of the disease on the country by preventing the fullest exploitation of the natural resources, agricultural and mineral and the successful development of various kinds of manufacturing industries, probably ran into unbelievable millions of pounds sterling every year.

It was not generally stated that malaria was a killing disease. In a sense it was not, for only about one per cent of those contracting it succumbed to its direct effects. Yet malaria was directly responsible for more than 1,000,000 deaths in India every year and in years of epidemic the figure was much higher.

Malaria also had other serious effects on the population, and it appeared that the disease tended to hinder the progress of man at every step.—(*From, Medical Progress, June '36 issue, p. p. 15.*)

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Salt-free, Meatless Diet Beneficial in Tuberculosis.—*Dr. Max Gerson*, of Westphalia, has printed a large volume giving an account of his experience with the salt-free, meatless diet originated by him for the treatment of tuberculosis and other chronic diseases affecting the general nutrition of the body. Some twenty-five years ago, he cured himself of migraine by eliminating salt from his food. Others met with success by this method. One patient treated for migraine incidentally was healed of lupus and this led to the trial of the diet for tuberculosis. The principle ingredients were unsalted butter, raw and cooked fruit, salad, steamed vegetables, meal and flour, eggs, pudding, unshelled rice, sugar, nectar, and olive oil. This fare was extensively used in Berlin for the treatment of bone and joint tuberculosis. Gerson came to believe that the diet would be useful in a wide range of diseases from rheumatoid arthritis to gastric ulcer.

The Lancet, in reviewing the book, tells of a group of twentyfive persons suffering from advanced tuberculosis who were placed on this regimen. Three were tired of the food and took forbidden articles The other twenty-two were faithful and none of them had died in the year of observation. The X-ray showed them all to be on the way to complete recovery.

J. Karpati, in a German periodical quoted by the *British Medical Journal*, tells how women in childbirth who had been on a salt-free diet had the first stage of labor considerably shortened and comparatively freed from pain. Similar results have been reported by Reeb and his co-workers in Strasbourg.—*Good Health, U. S. A.*

Health Tit-Bits

This is our chief bane.—That we live not according to the light of reason, but after the fashion of others.—*Seneca.*

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Roman gladiator.—The chief food of the Roman gladiator was barley cakes and oil, a diet eminently fitted to give muscular strength and endurance.—*Hippocrates.*

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Buttermilk or curds made in aluminium vessels after meals controls acidity and acts like drugs used for hyperchlor hydria etc. — *Journal of Ayurveda.*

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Mangoes contain sugar and highly refined turpentine in them. They also contain iron, useful acid and they are useful in rheumatism, diarrhoea, diabetes, etc.—*From Kulkarni's "Naturopathy."*

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Vitamin C During Pregnancy and Lactation.—During pregnancy the need for vitamin C is greater than for those women who are not pregnant, and during lactation the need is still greater than during pregnancy. —*Medical World.*

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Vitamin-E may be effective in the prevention of 'habitual abortion'. This vitamin is obtained in large amounts from wheat germ from which an oil is cold-pressed. It does not, however, cure human sterility—*The Doctor & Oil Quarterly.*

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Diabetic Girls mature late. Under insulin therapy, maturity is accelerated (Joslin). Diabetes should be suspected in mothers who give birth to very large children. — *The Doctor & Od Quarterly.*

Wound Treatment.—The essence of wound treatment is an attempt (a) to remove foreign material such as dirt, and (b) to remove serum, blood and devitalized tissue as represented by bruised or frayed skin, fascia, muscle or other elements.—*John J. Moorhead, Southern Surgery—Medical Times, April, '36.*

* * *

Who is the Best-Fed Nation.—Who, then, are the nations whose dietaries are not open to question and criticism? In the doctor's (Dr. Stephens) estimation, the Japanese are the best-fed nation.

The Japanese, we are told, eat rice in the place of potatoes so as to obtain an adequate amount of starch, but they also eat with it eggs, vegetables, fruits, soya beans, oils, and fish, as well as a certain amount of meat.—*Health for All.*

* * *

Who Lives Longer.—A newspaper syndicate writer on health topics told his readers recently that "tall men live longer than short men, thin men longer than fat, married men longer than bachelors, and vegetarians longer than carnivorous men."

To be sure, there isn't very much any of us can do to increase our height.

If we are short, we're short for keeps. But fat men can be thinner if diet and exercise are intelligently controlled. Bachelors, with a few lamentable exceptions, can take unto themselves wives. Meat eaters can turn their backs on the butcher shop and go in for vegetables and fruits.

Thus three of the four stipulations noted above are controllable.—*O. W.*

Book Reviews

The Snakes of India.—*By Lt. Col. K. G. Gharpurey,* I.M.S., Published by the Popular Book Depot, Bombay 7, Price Rs. 8/-

India is said to be a land of venomous snakes and dangerous wild beasts and nearly 20,000 to 23,000 persons die every year of snake bite in British India alone, and if we include the States, the figures will mount up to 30,000. This is ten times the number of deaths that occur from wild animals such as tigers, panthers, leopards, bears, wolves, hyaenas and crocodiles. While prevention of mortality from wild animals is easy of accomplishment, that from snake-bite is beset with many difficulties, chief of them being superstition, ignorance, and delay in treatment. Snakes are deified and worshipped in India and any injury done to them is looked upon as a curse on the entire family for generations yet unborn. Lack of sufficient knowledge on the part of the people to distinguish poisonous from non-poisonous snakes is responsible for a good number of deaths, as a result of shock from fright. Again, though scientific treatment is available, it is seldom resorted to in time and herbs, mantrams and quack remedies are tried one after another, with the result that death overtakes through sheer delay. This book on "The Snakes of India" is intended to dispel ignorance and superstition and give a correct idea about the various kinds of snakes and is written by one whose interest in the subject extends to over 25 years. The book is replete with illustrations and nicely printed and bound. It is a book that ought to be in the hands of every individual who cares for his own safety and that of his family, relations and friends.

The Prescriber's Guide—*By Dr. Umar Manji Chouhan,* L.C.P.S., H.M.B., (CAL.), M.D., & H.S., (HON.), (CAL.) and Editor, "The Medical Journal", Gondal. Published by the author, pp. 596, Price Rs. 2-4-0.

This is a very useful book of Reference to Medical men, especially to the budding practitioners. Prescriptions are too many to be remembered and the medical practitioner who has just commenced practice will have to make constant references to standard works on Materia Medica, which is no easy task. The author has taken considerable pains to bring out this guide which is at once cheap and handy and covers the entire field in a summarised form. We commend it to our readers who are medical practitioners.

Health Calendar—September 1936

By Mr. N. [illegible] Naidu,

23, Sivaraman St., Triplicane, Madras.

Tues.	1	The glutton digs his grave with his teeth.
Wed.	2	Play out of doors every day.
Thurs.	3	Fresh air can be had for nothing.
Friday.	4	Temperance is the nurse of chastity.
Sat.	5	Open windows entice sunshine.
Sun.	6	If you are sick, seek competent medical advice.
Mon.	7	A dirty child makes a dirty man.
Tues.	8	*Sri Krishna Jayanthi.*
Wed.	9	To lengthen your life shorten your meals.
Thurs.	10	Plants grow and thrive on sunlight : So also human beings.
Friday.	11	No distinct benefit to health results from chewing tobacco.
Sat.	12	Flies breed in filth.
Sun.	13	Keep calm and serene.
Mon.	14	Early to bed brings health.
Tues.	15	Universal vaccination will banish small-pox.
Wed.	16	Leave your drink to the end of the meal if you can.
Thurs.	17	To-day save, tomorrow enjoy good health.
Friday.	18	Screening will assist in protecting against mosquitoes.
Sat.	19	*Vinayaka Chathurthi.*
Sun.	20	Damp house deadly house.
Mon.	21	Pneumonia is a sputum-borne disease.
Tues.	22	Keep all cowsheds and stables clean.
Wed.	23	Ill habits gather by unseen degrees.
Thurs.	24	Health stays out of a dirty house.
Friday.	25	A good laugh is the best tonic in the world.
Sat.	26	Dust contains the germs of disease.
Sun.	27	Guard the portals of your body against the disease burglar.
Mon.	28	*Louis Pasteur died 1895.*
Tues.	29	Nature is the greatest teacher.
Wed.	30	Keep good humour still, whatever you lose.